## Second Quarter 2016

## Service Delivery Quarterly Performance Report



		Q2 Sy	stem-w	ide Boardii	ngs	Y THE		
Boardings by Service Mode	Second Quarter			YTD through June			Annual SIP	
	2015	2016	%Δ	2015	2016	%Δ	Target	% YTD Targe
ST Express	4,741,700	4,761,246	0.4%	9,184,707	9,228,211	0.5%	19.5 M	97%
Sounder	942,541	1,063,055	12.8%	1,843,914	2,099,824	13.9%	3.73 M	117%
Tacoma Link	251,495	237,029	-5.8%	508,445	481,397	-5.3%	0.95 M	102%
Link	2,955,432	5,224,353	76.8%	5,380,429	8,296,484	54.2%	17.2 M	118%
Paratransit	11,885	11,823	-0.5%	24,526	22,907	-6.6%	0.07 M	65%
Total Boardings	8,903,054	11,297,505	26.9%	16,942,020	20,128,823	18.8%	41.45 M	107%
Average Weekday Boardings	118,437	148,924	25.7%	118,437	134,987	14.0%		20776

Total Sound Transit ridership increased by 27% during the second quarter of 2016 compared to the same period in 2015. Sounder and Link saw increases during the quarter, with Tacoma Link and Paratransit registering declines, and ST Express stayed essentially flat. System-wide average weekday boardings increased 26% compared to the second quarter in 2015.

ST Express bus ridership remained essentially flat (+0.4%) compared to the second quarter in 2015. However, average weekday boardings came to 65,805, which was 8% increase over the second quarter of 2015.

**Sounder** commuter rail ridership was up 13%, continuing its upward ridership trend. Similarly, average weekday boardings were 16,186, reflecting a 12% increase over the second quarter of 2015.

**Tacoma Link** ridership saw a decline of 6% compared to the same period of last year. Average weekday boardings stood at 3,227 for the second quarter of 2016, a 5% decrease compared to the same period of 2015. At the same time, however, Tacoma Link ridership was 2% over the YTD budget target in the second quarter of 2016.

Link light rail ridership showed strong growth during the second quarter, with a 77% increase compared to the same period of last year. The ridership growth was largely due to the opening of the University Link extension on March 19. In addition, the implementation of 6-minute peak frequencies on Link has helped drive ridership growth since last fall.

**Paratransit** ridership continued to decline, with a 1% drop for the second quarter of 2016. Paratransit service is provided along the Link corridor under contract with King County Metro. Changes in eligibility requirements have impacted paratransit ridership throughout the King County service area.

## Quarterly Data (April to June 2016)

ST Express ridership remained essentially flat (increased slightly by 20K boardings or 0.4%) during Q2 2016. However, average weekday boardings increased by 8% to 65,805. Ridership growth was seen on the cross Lake Washington routes, with three of those routes continuing to post significant increases in ridership. Route 542 (Redmond-University District) increased 30%, and Route 550 (Bellevue-Seattle) increased 3%, and Route 554 (Issaquah-Seattle) increased 8%.

Route 586 showed a decline of 28% during Q2, due to a decrease in the number of daily trips operated on the route, which became effective with the September 2015 service change.

During Q2 2015, Link service operated between SeaTac Airport and Stadium Station only during the weekends of May 30-31 and June 7-8, to allow for improvements to the Downtown Seattle Transit Tunnel necessary for the University Link opening. Bus shuttles connected Stadium Station with downtown Seattle destinations, and carried a total of 46,529 Link passengers in that period.

**Sounder** ridership continued its double-digit growth in Q2, which is 13% increase compared to same period of last year. Both Sounder lines showed significant growth, with a 25% increase on the North Line and a 11% increase on the South Line. Besides healthy ridership gains, the Alaskan Way Viaduct closure in May contributed to overall Sounder growth in Q2 as well.

Tacoma Link ridership was down by 14K boardings, or 6%, during Q2 2016.

*Link* ridership increased by 77% in Q2 versus same period of last year, mainly driven by the opening of University Link extension in Q1 2016 and the implementation of 6-minute peak frequencies in Q4 2015. Average weekday boardings increased to 63,577, which was 76% growth versus same period of last year.

The same of the same of	ST Express			Miles	
1007		Q2 2015	Q2 2016	%∆	YTD
510-513	Everett-Seattle	675,826	667,464	-1%	1,302,32
522	Woodinville-Seattle	406,710	407,128	0%	778,815
532	Everett-Bellevue	128,819	135,678	5%	269,134
535	tynnwood-Bellevue	131,780	134,317	2%	264,781
540	Kirkland-U. District	43,157	41,396	-4%	86,362
541	Overlake-U. District	N/A	40,818	N/A	43.033
542	Redmond-U. District	111,227	145,093	30%	258.033
545	Redmond-Seattle	705,527	668,946	-5%	1,317,115
550	Bellevue-Seattle	776,399	800,113	3%	1,566,615
554	Issaquah-Seattle	288,071	310,235	8%	572,304
555/556	Issaquah-Northgate	105,869	103,710	-2%	205,794
560	West Seattle-SeaTac- Bellevue	141,314	132,351	-6%	263,065
566/567	Auburn-Kent-Overlake	149,258	139,702	-6%	279.011
574	Lakewood-SeaTac	199,678	191,143	-4%	375,935
577/578	Seattle-Federal Way/ Puyallup	267,296	271,420	2%	529,928
580	Lakewood-Puyallup	N/A	28,462	N/A	59,516
586	Tacoma-U. District	39,978	28,639	-28%	60,959
590-595	Lakewood/Tacoma- Seattle	489,494	483,318	-1%	927,580
596	Bonney Lake-Sumner	28,789	30,983	8%	63,406
	Sounder Suppl Bus	5,978	267	-96%	3.411
	Link Supplemental Bus	46,529	64	N/A	1,090
S	T Express Total	4,741,700	4,761,246	0%	9,228,211
A	verage Weekday	60,844	65,805	8%	64,157

Sounder C	ommuter R	ail Boardings	by Corrid	for
North Line	Q2 2015	Q2 2016	%Δ	YTD
Commuter	84,857	103,425	22%	193,947
Special	8,007	13,035	63%	14,502
Subtotal	92,865	116,460	25%	208,449
South Line	Q2 2015	Q2 2016	%Δ	YTD
Commuter	838,097	932,502	11%	1,875,29
Special	11,580	14,093	22%	16,079
Subtotal	849,677	946,594	11%	1,891,379
Total Sounder	942,541	1,063,055	13%	2,099,824
Average Weekday	14,421	16,186	12%	16,240
Tace	oma Link Lig	ht Rail Board	dings	
	Q2 2015	Q2 2016	%Δ	YTD
ac Dome-Theatre Dist	251,495	237,029	-6%	481,397
Average Weekday	3,385	3,227	-5%	3,290
	Link Light R	ail Boardings	THE NAME OF THE PARTY OF THE PA	2000
	Q2 2015	Q2 2016	%Δ	YTD
Seattle-SeaTac	2,955,432	5,224,353	77%	8,296,484
Average Weekday	36,058	63,577	76%	51,174
	Paratransi	t Boardings		
	Q2 2015	Q2 2016	%Δ	YTD
Link Service Area	11,885	11,823	-1%	22,907
Average Daily	131	130	-1%	126
Soui	nd Transit S	ystem Board	ings	
	Q2 2015	Q2 2016	%Δ	YTD
Total Boardings	8,903,054	11,297,505	27%	20,128,823
Average Weekday	118,437	148,924	26%	134,987

## **Quarterly Data (April to June 2016)**

ST Express Bus	Q2 2014	Q2 2015	Q2 2016	Q2 Budget
Revenue Vehicle Hours Operated	137,666	146,088	148,532	144,500
Revenue Vehicle Miles Operated	2,918,595	2,907,305	2,987,059	2,998,500
Trips Operated	113,048	113,458	118,542	116,500
Platform Hours Operated	179,735	182,058	190,947	186,250
Boardings	4,491,346	4,741,700	4,761,246	4,924,433
Boardings per Revenue Hour	32.6	32.5	32.1	34.1
Boardings per Trip	39.7	41.8	40.2	42.3
Cost per Boarding	\$5.97	\$5.98	\$6.37	\$6.33
Percentage of Scheduled Trips Operated	99.9%	99.9%	99.8%	≥ 99.8%
On Time Performance	85.5%	82.8%	83.1%	≥ 85.0%
Customer Complaints per 100K Boardings	12.3	13.2	16.3	< 15
Prev. Accidents per 100K Platform Miles <sup>4</sup>	0.72	0.82	0.86	≤ 0.80
Sounder Commuter Rail	Q2 2014	Q2 2015	Q2 2016	Q2 Budget
Revenue Vehicle Hours Operated	12,656	14,909	14,941	
Revenue Vehicle Miles Operated	402,497	450,017	453,674	14,038
Trips Operated	1,786	1,827		466,538
Boardings	817,127	942,541	1,838	1,841
Boardings per Revenue Vehicle Hour	64.6	63.2	1,063,055	925,973
Boardings per Trip	457.5	515.9	71.1	66.0
Cost per Boarding	\$12.06	\$10.79	578.4	503.1
Percentage of Scheduled Trips Operated	98.0%		\$10.07	\$12.22
On Time Performance	93.5%	99.8%	99.9%	≥ 99.5%
Customer Complaints per 100K Boardings	93.5%	96.0%	94.7%	≥ 95.0%
Prev. Accidents per 100K Platform Miles <sup>4</sup>	0.00	5.3	6.6	< 15
Tacoma Link Light Rail	Q2 2014	0.00	0.00	≤1.00
Service Hours Operated		Q2 2015	Q2 2016	Q2 Budget
Service Miles Operated	2,461	2,467	2,466	2,461
Trips Operated	19,018	18,993	18,986	19,073
Boardings	12,306	12,333	12,329	12,370
Boardings per Service Vehicle Hour	247,599	251,495	237,029	240,835
Boardings per Trip	100.6	102.0	96.1	97.9
Cost per Boarding	20.1	20.4	19.2	19.5
Percentage of Scheduled Trips Operated	\$3.89	\$4.72	\$4.62	\$5.35
On Time Performance	99.8%	99.9%	100.0%	≥ 98.5%
Customer Complaints per 100K Boardings	99.8%	99.9%	100.0%	≥ 98.5%
Prev. Accidents per 100K Platform Miles <sup>4</sup>	0.8	0.4	1.3	< 15
	0.00	0.00	0.00	≤ 1.66
Link Light Rail	Q2 2014	Q2 2015	Q2 2016	Q2 Budget
Revenue Vehicle Hours Operated	36,110	35,690	45,785	44,478
Revenue Vehicle Miles Operated	676,848	657,354	938,551	882,048
Trips Operated	22,695	22,563	25,256	25,166
Boardings	2,804,982	2,955,432	5,224,353	4,205,000
Boardings per Revenue Vehicle Hour	77.7	82.8	114.1	94.5
Boardings per Trip	123.6	131.0	206.9	167.1
Cost per Boarding	\$5.46	\$5.42	\$4.20	\$5.08
Percentage of Scheduled Trips Operated	99.6%	99.3%	98.4%	≥ 98.5%
Headway Performance <sup>5</sup>	95.0%	89.6%	89.0%	≥ 90.0%
Customer Complaints per 100K Boardings	0.7	1.2	2.4	< 15
Prev. Accidents per 100K Platform Miles <sup>4</sup>	0.04	0.00	0.00	≤ 0.30

<sup>1-</sup>Revenue hours: The total amount of time during which service is available to carry passengers. Tacoma Link reports as service hours since it does not collect fares.
2-Cost per boarding is calculated as the total actual operating costs (including Agelicy overhead) before depreciation divided by the total number of riders.
3-On-time performance standards are described in the budget.
4-Preventable accident: An accident in which the operating employee failed to do everything reasonable to prevent the accident.
5-Headway Performance: 2015 and 2016 are reported using a tolerance of +/- 2 minutes (a tolerance of +/- 3 minutes was used for 2014).

ST Express Bus	YTD 2014	YTD 2015	YTD 2016	YTD Budget	Notes
Revenue Vehicle Hours Operated	273,493	288,671	291,955	289,000	The state of the s
Revenue Vehicle Miles Operated	5,799,699	5,789,485	5,898,487 234,771	5,997,000	
Trips Operated	225,057	225,462		233,000	ST Express did not meet the targets for on-time performance and customer
Platform Hours Operated	356,918	359,735	373,900	372,500	complaints due to overcrowding and
Boardings	8,643,990	9,184,707	9,228,211	9,525,792	impact of traffic congestion that caused buses to run late. ST Express
Boardings per Revenue Hour	31.6	31.8	31.6	33.0	also was outside of the targeted range
Boardings per Trip	38.4	40.7	39.3	40.9	for preventable accidents in Q2. While the majority of accidents are minor in
Cost per Boarding	\$6.20	\$6.10	\$6.25	\$6.52	nature, staff and partners are working
Percentage of Scheduled Trips Operated	99.9%	99.9%	99.8%	≥ 99.8%	to identify trends and implement changes to reduce preventable acci-
On Time Performance	86.1%	85.8%	83.2%	≥ 85.0%	dents, with a focus on safety as the
Customer Complaints per 100K Boardings	12.0	12.8	16.1	< 15	highest priority
Prev. Accidents per 100K Platform Miles <sup>4</sup>	0.72	0.82	0.86	≤ 0.80	
Sounder Commuter Rail	YTD 2014	YTD 2015	YTD 2016	YTD Budget	Notes
Revenue Vehicle Hours Operated	24,940	29,097	29,300	28,075	
Revenue Vehicle Miles Operated	793,409	884,348	889,772	933,076	Sounder did not meet the target during Q2 YTD for percentage of
Trips Operated	3,458	3,554	3,578	3,681	scheduled trips operated mainly due to
Boardings	1,577,070	1,843,914	2,099,824	1,795,039	mudslide disruptions in QL Sounder also fell slightly below the OTP target.
Boardings per Revenue Vehicle Hour	63.2	63.4	71.7	63.9	partly due to construction of the third
Boardings per Trip	456.1	518.8	586.9	487.6	mainline by BNSF (an ST2 project to expand railroad capacity) near
Cost per Boarding	\$11.90	\$10.73	\$9.90	\$12.43	Tukwila that forced a single track
Percentage of Scheduled Trips Operated	95.5%	99.1%	98.4%	≥ 99.5%	railroad for a number of weeks. Other factors also impacted OTP, such as
On Time Performance	93.8%	96.9%	94.8%	≥ 95.0%	slow orders and track blockage due to
Customer Complaints per 100K Boardings	8.4	4.7	7.3	< 15	mudslides and high winds, freight interference, mechanical issues, and
Prev. Accidents per 100K Platform Miles	0.00	0.00	0.00	≤1.00	other minor incidents
Tacoma Link Light Rail	YTD 2014	YTD 2015	YTD 2016	YTD Budget	Neton
Service Hours Operated	4,874	4,862	4,889	4,922	Notes
Service Miles Operated	37,664	37,434	37,664	38,146	500
Trips Operated	24,105	24,308	24,459	24,741	
Boardings	485,294	508,445	481,397	470,512	
Boardings per Service Vehicle Hour	99.6	104.6	98.5	95.6	
Boardings per Trip	20.1	20.9	19.7	-	Tacoma Link met all service
Cost per Boarding	\$4.15	\$4.16	\$4.31	19.0 \$5.45	performance targets in Q2 YTD.
Percentage of Scheduled Trips Operated	99.8%	100.0%	99.8%	-	
On Time Performance	+			≥ 98.5%	ł
Customer Complaints per 100K Boardings	99.9%	100.0%	99.8%	≥ 98.5%	
Prev. Accidents per 100K Platform Miles <sup>4</sup>	1.2	0.4	0.8	< 15	
	0.00	0.00	0.00	≤ 1.66	
Link Light Rail	VTD 3044	10TD 2045	METER BOAR	NAMED IN TAXABLE	
	YTD 2014	YTD 2015	YTD 2016	YTD Budget	Notes
Revenue Vehicle Hours Operated	71,499	70,712	87,488	88,956	Notes
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated	71,499 1,341,899	70,712 1,303,481	87,488 1,721,574	88,956 1,764,095	Link was slightly outside the target
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated	71,499 1,341,899 45,082	70,712 1,303,481 44,722	87,488 1,721,574 50,070	88,956 1,764,095 50,332	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings	71,499 1,341,899 45,082 5,156,371	70,712 1,303,481 44,722 5,380,429	87,488 1,721,574 50,070 8,296,484	88,956 1,764,095 50,332 7,050,000	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions,
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour	71,499 1,341,899 45,082 5,156,371 72.1	70,712 1,303,481 44,722 5,380,429 76.1	87,488 1,721,574 50,070 8,296,484 94.8	88,956 1,764,095 50,332 7,050,000 79.3	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour Boardings per Trip	71,499 1,341,899 45,082 5,156,371 72.1 114.4	70,712 1,303,481 44,722 5,380,429 76.1 120.3	87,488 1,721,574 50,070 8,296,484 94.8 165.7	88,956 1,764,095 50,332 7,050,000 79.3 140.1	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and other minor delays. Headway
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour Boardings per Trip Cost per Boarding	71,499 1,341,899 45,082 5,156,371 72.1 114.4 \$5.66	70,712 1,303,481 44,722 5,380,429 76.1 120.3 \$5.79	87,488 1,721,574 50,070 8,296,484 94.8 165.7 \$4.80	88,956 1,764,095 50,332 7,050,000 79.3 140.1 \$6.06	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and other minor delays. Headway management was slightly below target, as performance has
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour Boardings per Trip Cost per Boarding Percentage of Scheduled Trips Operated	71,499 1,341,899 45,082 5,156,371 72.1 114.4 \$5.66 99.7%	70,712 1,303,481 44,722 5,380,429 76.1 120.3 \$5.79 99.3%	87,488 1,721,574 50,070 8,296,484 94.8 165.7 \$4.80 98.2%	88,956 1,764,095 50,332 7,050,000 79.3 140.1 \$6.06 ≥ 98.5%	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and other minor delays. Headway management was slightly below target, as performance has deteriorated since the start of
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour Boardings per Trip Cost per Boarding Percentage of Scheduled Trips Operated Headway Performance <sup>5</sup>	71,499 1,341,899 45,082 5,156,371 72.1 114.4 \$5.66 99.7% 94.9%	70,712 1,303,481 44,722 5,380,429 76.1 120.3 \$5.79 99.3% 89.6%	87,488 1,721,574 50,070 8,296,484 94.8 165.7 \$4.80 98.2% 89.6%	88,956 1,764,095 50,332 7,050,000 79.3 140.1 \$6.06 ≥ 98.5% ≥ 90.0%	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and other minor delays. Headway management was slightly below target, as performance has deteriorated since the start of University Link due to increased passenger traffic on buses and trains
Revenue Vehicle Hours Operated Revenue Vehicle Miles Operated Trips Operated Boardings Boardings per Revenue Vehicle Hour Boardings per Trip Cost per Boarding Percentage of Scheduled Trips Operated	71,499 1,341,899 45,082 5,156,371 72.1 114.4 \$5.66 99.7%	70,712 1,303,481 44,722 5,380,429 76.1 120.3 \$5.79 99.3%	87,488 1,721,574 50,070 8,296,484 94.8 165.7 \$4.80 98.2%	88,956 1,764,095 50,332 7,050,000 79.3 140.1 \$6.06 ≥ 98.5%	Link was slightly outside the target for percentage of scheduled trips operated in Q2 YTD 2016 due to numerous service disruptions, particularly related to track blockage from unrelated auto accidents and other minor delays. Headway management was slightly below target, as performance has deteriorated since the start of University Link due to increased

<sup>1-</sup>Revenue hours: The total amount of time during which service is available to carry passengers. Tacoma Link reports as service hours since it does not collect fares.

2-Cost per boarding is calculated as the total actual operating costs (including Agency overhead) before depreciation divided by the total number of riders.

3-On-time performance standards are described in the budget.

4-Preventable accident: An accident in which the operating employee failed to do everything reasonable to prevent the accident.

5-Headway Performance: 2015 and 2016 are reported using a tolerance of +/- 2 minutes (a tolerance of +/- 3 minutes was used for 2014).